



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,008	01/22/2002	Rima M. Nazanda	219.40217X00	7798

7590 09/08/2003  
Kenyon \$ Kenyon  
1500 K. Street, NW  
Suite 700  
Washington, DC 20005-1257

EXAMINER

QUILLEN, ALLEN E

ART UNIT	PAPER NUMBER
----------	--------------

2676

DATE MAILED: 09/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/051,008

Applicant(s)

NAZANDA ET AL.

Examiner

Allen E. Quillen

Art Unit

2676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other: .

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kazachinsky, et al, U.S. Patent 6,570,573 in view of Talbot, et al, U.S. Patent 6,272,600.

Art Unit: 2676

5. Regarding claim 1, representative of claims 8, 16-17, 24-25, 28, Kazachinsky discloses a graphics device (Figure 2, element 222, Column 4, lines 1-9) comprising: a mechanism to receive a plurality of data requests in a particular order (Column 5, lines 29-32); a multipurpose buffer mechanism to simultaneously monitor a status of said plurality of data requests (Figure 5, Column 7, lines 52 through Column 8, lines 46); Kazachinsky does not disclose a mechanism to output responses to said plurality of data requests in said particular order. Talbot teaches a mechanism to output responses to said plurality of data requests in said particular order (Column 2, lines 32-35). The motivation for combining data requests with output in particular order is to increase memory speed (Column 2, lines 32-33). Talbot is evidence that at the time of the invention it would have been obvious to one skilled in the art of graphics memory processing to combine the benefits of multiple data requests, as Kazachinsky discloses, with a particular order of requests, as Talbot teaches, to increase memory speed.

6. Regarding claim 2, representative of claim 9, Kazachinsky discloses a graphics device of claim 1, wherein said multipurpose buffer mechanism maintains information regarding said plurality of data requests to a plurality of memory locations (Figure 5, Column 7, lines 52 through Column 8, lines 46).

7. Regarding claim 3, representative of claims 10, 19, 26, 27, 29-31, Kazachinsky discloses a graphics device of claim 1, wherein said multipurpose buffer mechanism comprises an age counter section and a buffer control section (see above, Column 8, lines 26-46).

Art Unit: 2676

8. Regarding claim 4, representative of claims 11 and 20, Kazachinsky discloses a graphics device of claim 3, wherein said age counter section (see above). Kazachinsky does not disclose comprises a plurality of shift registers each corresponding to one of said plurality of data requests. Talbot teaches comprises a plurality of shift registers each corresponding to one of said plurality of data requests (Column 9, lines 58-62; Column 8, lines 35-38, 55-56). The motivation for combining data requests with shift register buffer is to increase memory speed (Column 2, lines 32-33). Talbot is evidence that at the time of the invention it would have been obvious to one skilled in the art of graphics memory processing to combine the benefits of multiple data requests, as Kazachinsky discloses, with a particular order of requests, as Talbot teaches, to increase memory speed.

9. Regarding claim 5, representative of claims 12, 21, Kazachinsky discloses a graphics device of claim 3, wherein said buffer control section identifies a status of each of said plurality of data requests (Figure 5, Column 7, lines 52 through Column 8, lines 46).

10. Regarding claim 6, representative of claims 7, 13, 15, 18, 22, Kazachinsky discloses a graphics device of claim 3, wherein said multipurpose buffer mechanism determines an age of said plurality of data requests stored in said multipurpose buffer mechanism (see above, Column 8, lines 26-46).

Art Unit: 2676

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen E. Quillen whose telephone number is (703) 605-4584.

The examiner can normally be reached on Tuesday – Friday, 8:30am – noon and 1:00 - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew C. Bella, can be reached on (703) 308-6829.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**Or FAX'd to:**

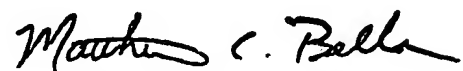
**(703) 872-9314 (for Technology Center 2600 only)**

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Sixth Floor (Receptionist), Arlington, Virginia

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number (703) 305-9600 or (703) 305-3800.

Allen E. Quillen  
Patent Examiner  
Art Unit 2676

\*\*\*August 27, 2003



**MATTHEW C. BELLA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600**